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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/608,011	06/30/2000	Hong-Ta James Chan	194027US3	9552

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EXAMINER

BRUENJES, CHRISTOPHER P

ART UNIT	PAPER NUMBER
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1772

DATE MAILED: 09/06/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/608,011	CHAN ET AL.	
	Examiner	Art Unit	
	Christopher P Bruenjes	1772	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) 1-9 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 10-21 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☒ Claim(s) 1-21 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 1-9, drawn to a method of producing a shaped article, classified in class 427, subclass 447.

II. Claims 10-21, drawn to a shaped article, classified in class 428, subclass 35.7.

Inventions I and II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product can be made by another process, such as applying the barrier material to the substrate of polyolefin without melting the barrier material first.

2. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

3. During a telephone conversation with Mr. Vastine on August 6, 2002 a provisional election was made with traverse to prosecute the invention of II, claims 10-21. Affirmation of this election must be made by applicant in replying to this Office action. Claims 1-9 withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 10-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 10, the claim is vague and indefinite because the limitation of "applying a powder of a barrier material, after melting it" is a process limitation, which receives little patentable weight in article claims. The

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article claim needs to be stated to represent the structure of the article. Because "applying a powder of a barrier material, after melting it" receives little patentable weight, the barrier material is regarded as a resin because after melting it the barrier material is no longer a powder.

Regarding claim 11, the limitation of injection molding is a process limitation. Process limitations receive little patentable weight, because an article is only limited by its structure and the same structure is attainable through different processes.

Regarding claims 12-13, intended use of an article receives little patentable weight, because an article is only limited by its structure and the same structure has many uses. In claim 12, the limitation of the article being "a head of a tubular container" and in claim 13 the article being "a component for fuel containers" are use limitations not structural limitations.

Claim 16 recites the limitation "the cutting face of the pinch-off part" in describing the face formed where the parison was used to blow mold the part. There is insufficient antecedent basis for this limitation in the claim. The pinch-off part needs to be described within the claim as it was in the specification in order to define the pinch-off part.

Claim 17 recites the limitation "the cutting face of the layer existing outside the interlayer" in describing the face formed at the opening, but the limitation fails to define the scope of where the coating was going to be applied. There is insufficient antecedent basis for this limitation in the claim. The cutting face of the layer existing outside the interlayer should be defined by explaining that the coating would cover the two exposed surfaces of the outer layers formed by the opening of the container.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this

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application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

5. Claims 10-15 and 19-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Hata et al. (USPN 6,033,749).

Hata anticipates a shaped article produced by applying a barrier material comprising ethylene-vinyl alcohol copolymer to at least a part of the surface of a substrate of a polyolefin comprising high-density polyethylene (see abstract). Hata also teaches that the shaped article is produced by injection molding (col. 6, lines 10-11) for use as a fuel container (see abstract). The fuel container is inherently a tubular container that would include a head and components made of the same material. Hata also anticipates a fuel container that is a product of coextrusion blow molding (col. 6, lines 10-15) comprising an interlayer of a barrier resin comprising ethylene vinyl alcohol copolymer and inner and outer layers of a polyolefin comprising high-density polyethylene. Further, in the claims 10-13, applicant is introducing process limitations and intended uses into product claims and, hence, such are given little patentable weight.

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claims 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hata et al (USPN 6,033,749) in view of Kido (USPN 6,357,617).

Hata anticipates a coextrusion blow-molded container as claimed in claim 15 and teaches that a container formed by extrusion blow molding which involves the step of pinching-off the parison would leave the inner layer of polyethylene exposed

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at that point without the barrier layer of ethylene vinyl alcohol copolymer (Hata col. 3 lines 30-33). Hata fails to teach applying a barrier material to the surface of the pinch-off part, the cutting face caused by an opening of the claimed shaped article, or a component attached to the opening of the shaped article.

However, Kido teaches a fuel tank made of polyethylene and ethylene vinyl alcohol copolymer (col. 2, lines 25-37) that contains a gas barrier sheet that is attached to the polyethylene that is exposed by the cutting of an opening through the body of the container in order to attach components (see abstract and Fig. 1) and the component that is attached (col. 2 lines 44-46). The gas barrier sheet comprises ethylene vinyl alcohol copolymer. Therefore, one of ordinary skill in the art would have recognized that a barrier material is added to the cutting face of an opening and to a component attached to said opening in order to prevent any region of the inner side surface of the component or the inner layer of the shaped article at the opening cut in the shaped article for the attachment from not being covered by the gas barrier sheet as taught by Kido. One of ordinary skill in the art would have also recognized that the pinch-off part that Hata claims is sealed only by the polyethylene is also provided with a barrier

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sheet to prevent a portion of the shaped article from not being covered by the gas barrier sheet as taught by Kido.

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to add Kido's barrier sheet comprising a barrier material of ethylene vinyl alcohol copolymer to the pinch-off part, the cutting face of the opening of the fuel tank of Hata and any components attached to the opening of Hata's fuel tank as taught by Kido.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

George (USPN 4,985,278) teaches a melted powder of a polyketone being coated to plastic. Gerek et al (USPN 3,947,617) teaches a melted powder of nylon, a type of polyamide, being coated to a substrate. Ageheim et al (USPN 6,383,587) teaches a barrier resin made of polyamide or polyester between two layers of polyethylene. Kawachi et al (USPN 6,214,426) and Nulman et al (5,618,599) teach a barrier resin made of EVOH between two layers of polyethylene.

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8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher P Bruenjes whose telephone number is 703-305-3440. The examiner can normally be reached on Monday thru Friday from 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on 703-308-4251. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

Christopher P Bruenjes
Examiner
Art Unit 1772

CPB
September 3, 2002


HAROLD PYON
SUPERVISORY PATENT EXAMINER


9/4/02